

WHAT IS CLAIMED IS:

1. An electro-optical device, comprising:
data lines extending in a predetermined direction;
scanning lines extending orthogonal to the data lines;
pixel electrodes and pixel switching elements arranged at intersections of the scanning lines and the data lines; and
capacitors including, as first electrodes, conductive layers connected to or extending from the data lines.
2. The electro-optical device according to Claim 1, further comprising:
capacitor electrode wiring lines extending in a direction orthogonal to the data lines,
the capacitors including second electrodes that include other conductive layers connected to or extending from the capacitor electrode wiring lines.
3. The electro-optical device according to Claim 2, the capacitor electrode wiring lines having a fixed potential.
4. The electro-optical device according to Claim 3, further comprising:
a substrate;
a counter substrate facing the substrate;
a counter electrode formed on the counter substrate and arranged to face the pixel electrodes;
a driving circuit arranged on either the counter substrate or the substrate that drives the scanning lines, the data lines, and the pixel electrodes;
a first power source that supplies a fixed potential to the counter electrode; and
a second power source that supplies a fixed potential to the driving circuit,
the capacitor electrode wiring lines being connected to the first power source or the second power source to have a fixed potential.
5. The electro-optical device according to Claim 2, the capacitor electrode wiring lines being made of a low resistance material.
6. The electro-optical device according to Claim 1, further comprising:
a data line driving circuit that drives the data lines at one end of the data lines, the capacitors being provided at the other end of the data lines.
7. The electro-optical device according to Claim 1, further comprising:
a data line driving circuit that drives the data lines at one end of the data lines;

and

a test circuit that checks the operation of the electro-optical device at the other end of the data lines.

8. The electro-optical device according to Claim 1, further comprising:
storage capacitors connected to the pixel electrodes and the pixel switching elements, such that, during manufacturing, at least some of the members forming the capacitors can be formed in the same step as at least some of the members forming the storage capacitors.
9. The electro-optical device according to Claim 2, such that during manufacturing, the capacitor electrode wiring lines and the capacitors can be formed in the same step.
10. The electro-optical device according to Claim 1, further comprising:
bypass layers connected to the data lines and the conductive layers, such that, during manufacturing the bypass layers are formed in the same step as the scanning lines.
11. The electro-optical device according to Claim 10, further comprising:
a data line driving circuit that drives the data lines at one end of the data lines;
and
a test circuit that checks the operation of the capacitors and the electro-optical device at the other end of the data lines, the test circuit being connected to the data lines through the bypass layers.
12. The electro-optical device according to Claim 1, portions to be the first electrodes of the conductive layers being wider than the data lines.
13. The electro-optical device according to Claim 1, the data lines being divided into a plurality of groups, to which image signals are simultaneously supplied.
14. A method of manufacturing an electro-optical device which includes, on a substrate, data lines extending in a predetermined direction, scanning lines extending orthogonal to the data lines, pixel electrodes and thin film transistors arranged at intersections of the scanning lines and the data lines, storage capacitors connected to the pixel electrodes and the thin film transistors, and capacitors connected to the data lines or extending from the data lines, the method comprising:
forming at least some of the members forming the capacitors and at least some of the members forming the storage capacitors as the same film.
15. The method of manufacturing an electro-optical device according to Claim 14, the storage capacitors comprising:

pixel-potential-side capacitor electrodes connected to the pixel electrodes and the thin film transistors, fixed-potential-side capacitor electrodes arranged to face the pixel-potential-side capacitor electrodes, and first insulating films interposed between the both electrodes,

the capacitors comprise conductive layers connected to the data lines or extending from the data lines, other conductive layers arranged to face the conductive layers, and second insulating films interposed between the both layers, and simultaneously

forming the pixel-potential-side capacitor electrodes and the conductive layers as the same film;

forming the fixed-potential-side capacitor electrodes and the other conductive layers as the same film; and

forming the first insulating films and the second insulating films as the same film.

16. The method of manufacturing an electro-optical device according to Claim 14, further comprising:

before forming at least some of the members forming the capacitors and at least some of the members forming the storage capacitors as the same film;

forming gate electrodes and bypass layers forming the thin film transistors as the same film;

a forming contact holes to connect the bypass layers to the data lines; and

a forming contact holes to connect the bypass layers to the conductive layers.

17. The method of manufacturing an electro-optical device according to Claim 14, further comprising:

after forming at least some of the members forming the capacitors and at least some of the members forming the storage capacitors as the same film:

forming the data lines and capacitor electrode wiring lines extending in a direction orthogonal to the data lines as the same film; and

forming contact holes to connect the capacitor electrode wiring lines to the other conductive layers.

18. The method of manufacturing an electro-optical device according to Claim 14, the electro-optical device including a test circuit, and the method, further comprising:

forming wiring lines connected to the test circuit, the data lines, and the capacitor electrode wiring lines as the same film; and

forming contact holes to connect the wiring lines to the bypass layers.

19. An electronic apparatus comprising:
an electro-optical device according to Claim 1.